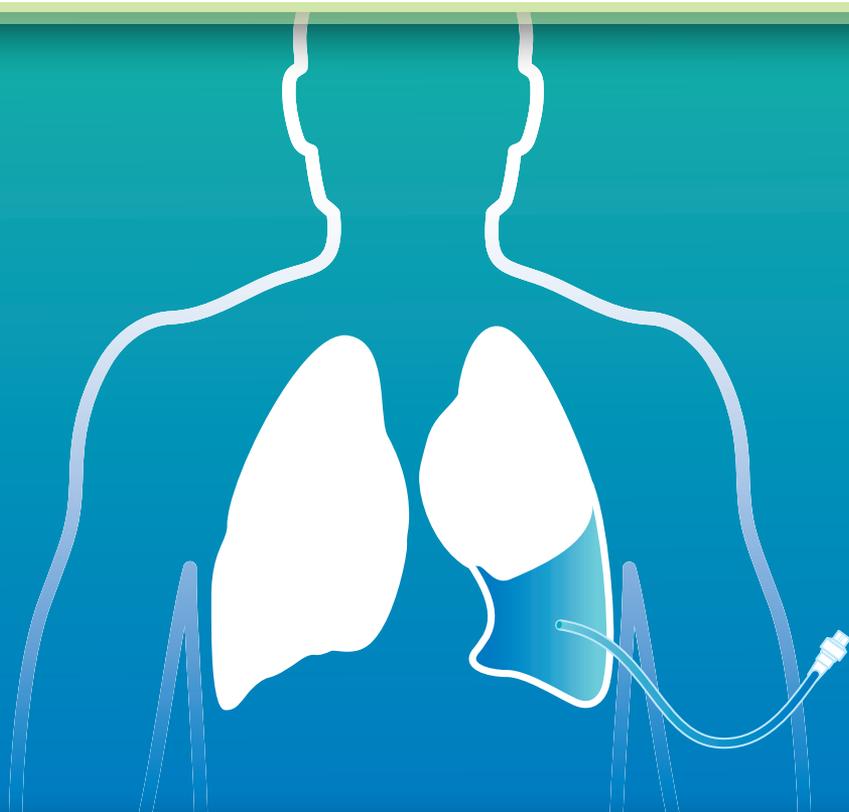


# Preparing & caring for your pleural drain



This booklet covers important information about your pleural drain. It describes how to prepare, what to expect on the day it is inserted, and how to care of yourself once you are back at home. Please review it carefully with your family. Speak to us if you have questions or concerns.

## **Acknowledgements**

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# A special message for you and your family

Using our experience and what patients and families have told us, we have designed this booklet to help you prepare for your pleural tube insertion and the care you will need afterwards, at home. We also highlight important supports that are available to you.

Please review this booklet carefully. Bring it with you on the day of your appointment.

Learning that you need to have a pleural drain can be stressful. But you are not alone. Our team of health care experts is here for you.

We want to be sure that you and your family receive the best care possible. Speak to us about your feelings, fears or worries. Knowing how you are doing will help us better meet your needs.

Sincerely,

*Your pleural drain care team*

*Montreal Chest Institute*

*McGill University Health Centre*

## How to reach us

### **Our address:**

Montreal Chest Institute,  
McGill University Health Centre (MUHC)  
Glen site - 1001 Decarie Blvd  
Montreal Quebec H4A 3J1

### **Our clinic location and room #:**

Day Hospital & Out-patient clinics  
Block D, Level RC  
Room 3314 - DRC.3314

### **Our telephone #:**

514-934-1934 extension: 32568  
Monday to Friday from 8am to 4pm

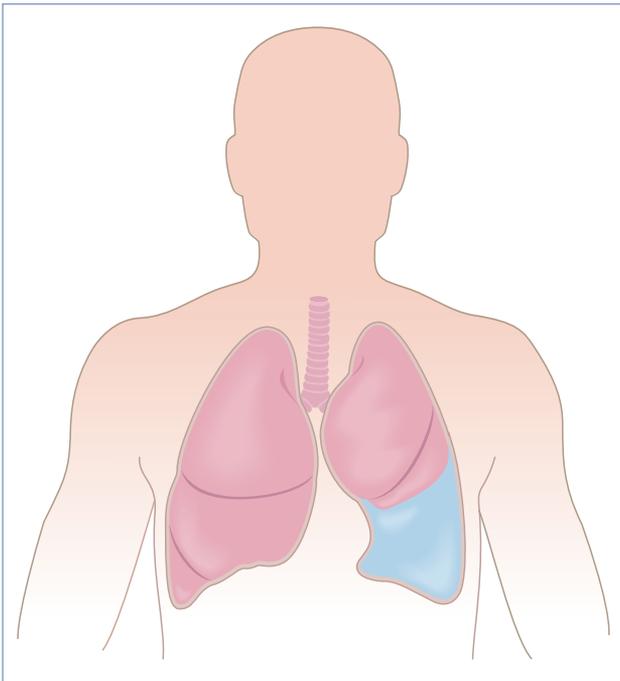
# About your pleural drain

## Why do you need it?

The area between your lungs and your chest wall is called the **pleural space**. This space normally has a very small amount of liquid.

When extra liquid builds up in this space, your lung can have trouble working properly. This can make it harder for you to breathe. We call this a **pleural effusion**.

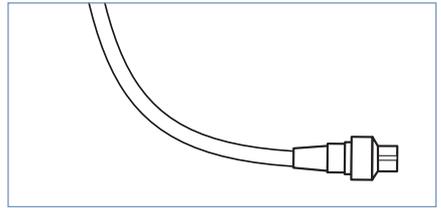
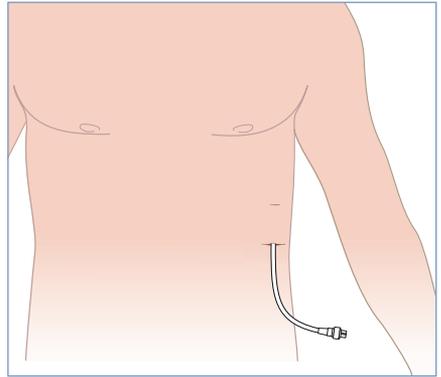
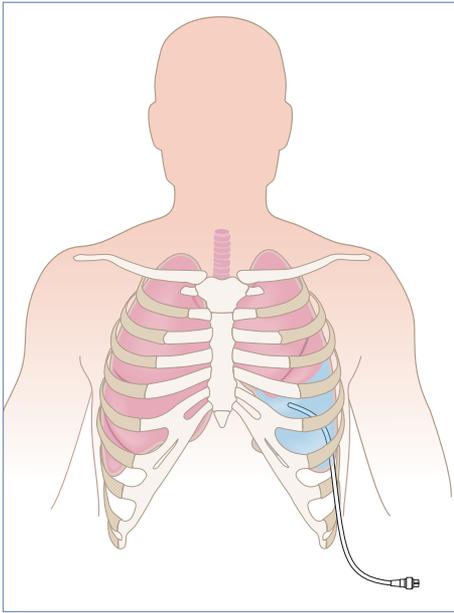
Draining the liquid out of this space (using a needle in your back, or **pleural tap**) will help you breathe better. However, if the liquid returns, you will have trouble breathing again. If this is the case for you, your health care team may suggest a **pleural drain**.



## What is it?

A pleural drain (also called a **pleural catheter**, or **PleurX®**) works to remove liquid from around your lungs. This can be done easily and painlessly, whenever it is needed, in your home.

This soft and flexible tube is thinner than a pencil. It is placed inside your chest, so that one end comes out through your skin. The tip of the tube that comes out through the skin is covered by a cap. Under that cap there is a one-way valve that prevents fluid from coming out or air from going inside the tube. The tube is protected by a bandage to keep it clean. It is not connected to a bag.



The benefits of having a pleural drain are:

- **You can avoid having repeated, painful procedures** (for example: pleural taps or inserting and removing chest tubes) every time there is liquid around your lungs.
- **You can avoid multiple trips to the hospital and hospital stays.**
- **It will be a lot easier to remove the liquid around your lungs.** A nurse from the CLSC will visit you at home to drain the liquid through the tube. You or a member of your family can also learn how to do the drainage if you wish to.

## What are the risks?

For most people, pleural drain insertion is a safe procedure. However, as with any medical procedure, there are certain risks. In other words, there is a small chance that you may have some problems.

Your doctor will talk to you about these risks, and what each of these means for you.

### **REMEMBER:**

There are risks with any medical procedure. Your doctor has suggested that you have a pleural drain because the benefits of having this are far greater than the risks.

### Short-term problems

After your procedure, you may notice any of the following:

- **Some pain (feeling like a bruised chest) during the first week** – acetaminophen is usually enough to control the pain.
- **Lung collapse or pneumothorax** – This is very rare. If it happens, your pleural tube can be used to help your lung fill up with air again. A chest X-ray will check for this before you leave.
- **Heavy bleeding inside or outside the chest** – This can happen, but it is very rare.

Generally, people with pleural drains do not have major problems over the long term. However, if problems come up, our team can help you deal with them.

## Long-term problems

Over weeks and months after the procedure, you might notice any of the following:

- **Skin or chest infection** – You can develop an infection if germs (e.g. bacteria) enter the pleural space through the tube. You can lower the chances of this with proper drain care and hygiene. This means making sure the tube does not get wet, that it stays covered by the bandage, and that the drain is always manipulated in a sterile way.
- **Tube blockage** – sometimes the tube stops draining because it gets blocked by thick liquid. It can be unblocked by our medical team in some cases, but in others we may have to replace the tube by a new one.
- **Cancer growth around the tube** – If you have cancer, sometimes cancer cells can grow in the area around the tube. If you notice a lump or pain around your tube, please let your doctors know. Your doctor will discuss the best treatment with you.

## **DID YOU KNOW?**

Your **immune system** keeps your body healthy. It does this by keeping out tiny, microscopic germs, such as bacteria and viruses, which cause **infection**. These germs are all around us. They live in water droplets, living things, and on surfaces.

Your skin is your first line of defense against germs. When the drain is placed in your body, we break this barrier by making a cut in your skin. For this reason, to keep germs from coming into your body through your catheter:

- Your doctor will thoroughly clean your skin before placing the tube.
- Our team will also teach you how to keep the tube area (**insertion site**) clean.
- We will also explain what changes to watch out for that could mean you have an infection. (See “How and when to call us for help” on page 17 to learn more).
- You must tell nurses or doctors who are not experienced with the care of chest drains to contact the day hospital team before manipulating it.

# Medications to stop taking ahead of time

Most blood thinners need to be stopped before the procedure to reduce the chance of bleeding.

Your doctor will tell you when it is safe to start taking your blood thinner medications again after the procedure.

## PLEASE NOTE:

Below are **general** guidelines on medications to stop taking. **DO NOT stop any of these medications without first discussing this with your doctor.** We will explain which medications to stop taking and when you should stop.

Speak to your doctor or call the Day Hospital team (514-934-1934 extension 32568) **right away** if you are taking any of these medications.

## Aspirin

(also called, EC ASA, ASA, acetylsalicylic acid)

Aspirin is usually stopped for 5 days before the procedure in persons without previous strokes or heart problems. Patients who have had a stroke or a heart problem can continue taking it.

(Example: if the procedure is booked for Wednesday May 10<sup>th</sup>, the last dose of aspirin should be taken on Thursday May 4<sup>th</sup>)

## Non-steroidal anti-inflammatory agents

(also called Advil, Motrin, Ibuprofen, Naproxen)

These drugs are usually stopped for 5 days before the procedure.

## Coumadin (also called Warfarin)

Warfarin is stopped for 5 days before the procedure.

## **DID YOU KNOW?**

Some people may need to take **heparin** injections during the time that they have stopped their **coumadin** (e.g. if you have metallic heart valve, are at high risk of stroke). Your doctor will explain if this is the case for you.

**Low-molecular-weight heparin** (also called Fragmin or Lovenox or Innohep)

**Half of the usual daily dose is taken 24 hours before the procedure.** The injection should not be taken on the day of the procedure. (Example: if you usually take 10000 units, then take 5000 units the day before the procedure in the morning, and none at all the day of.)

**Plavix** (also called Clopidogrel) & **Effient** (also called Prasugrel)

This medication is usually stopped for 5 days before the procedure unless the patient has had a recent stroke, heart attack, or cardiac stent insertion.

**Eliquis** (also called Apixaban) & **Xarelto** (also called Rivaroxaban)

**It is usually stopped for 2 days before the procedure.** (Example: if the procedure is booked for Wednesday May 10<sup>th</sup>, the last dose is taken on May 7<sup>th</sup>)

**Pradaxa** (Dabigatran)

**It is usually stopped for 2 days before the procedure.**

If you have a kidney problem, it is stopped for 4 days before the procedure.

# What will happen on the day?

## Eating and drinking

You can eat and drink normally before the installation of your pleural drain.

## Medications

You can take your usual medications on the day of the procedure, except the blood thinners (see page 9)

## Things to bring to the hospital

- An up-to-date list of all of your medications
- Your Medicare card and MUHC hospital card (blue card)

## Getting to the hospital

- 1 Go to the hospital (Montreal Chest Institute, room D RC.3314) at the time that was given to you.
- 2 Once you are at the Day Hospital, go to the main desk (nursing station). Be prepared to show your MUHC hospital card (blue card).

## How long will it take? Will I need to stay in hospital?

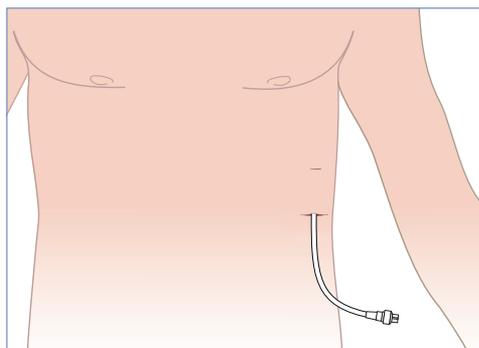
The pleural drain insertion will take about 30 minutes. You will **not** stay overnight in the hospital because the procedure is done with local freezing only. However, you should expect to spend at least 3 hours of your day with us. During this time:

- 1 You will meet with the day hospital nurse and doctor.
- 2 We will insert the pleural drain.
- 3 You will have an X-ray of your chest to make sure that the drain has been properly placed.
- 4 We will talk to you about how to care for your pleural drain.

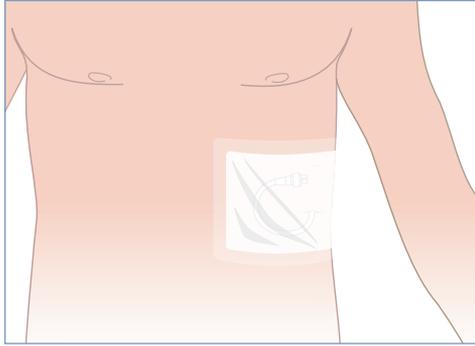
## What happens during the procedure?

This procedure is done in our Montreal Chest Institute Day Hospital center. Here is what to expect:

- 1** We will bring you to a bed where a nurse will do a physical check-up and ask you some questions.
- 2** You will meet with your doctor to go over the procedure. You will need to **sign a consent form** at this time. By signing this form, you are stating that you understand what was explained to you and agree to have the procedure.
- 3** You will have an ultrasound. Your doctor will ask you to sit or lie in a comfortable position. This is painless. It is done to find the best place to insert the tube.
- 4** Once you are comfortable, your doctor will clean your skin with a special cleanser. This liquid may feel cold.
- 5** Sterile drapes will be placed over your body. We will make sure that you have enough room to breathe comfortably.
- 6** We will inject a pain medication (local anesthetic) to numb the area where we will insert the tube. You may feel a little uncomfortable at first, but your pain will quickly go away.
- 7** Your doctor will then make 2 small cuts in your skin to insert the tube. This should not be painful. However, you may feel some pressure or tugging. He or she will pass the tube through the skin, and into the chest.



- 8 Your doctor will then secure the pleural drain in your chest and put sutures (stitches) on your skin.
- 9 Once the tube is in place, it will be used to remove liquid from your chest at the same time.
- 10 Finally, a bandage or dressing will be placed over the tube.



### **How does the drain stay in place?**

For the tube to stay firmly in position, it has a soft band (cuff) that sits just underneath your skin near the exit hole. Your skin will heal and grow around this band, which will prevent it from falling out.

A few stitches will be placed by the doctor and will help the drain stay in place until the skin has healed around the tube. Stitches will be removed 14 days after the procedure by the CLSC nurse.

# What will happen after your procedure?

## Pain control

After the procedure, your chest may feel bruised or sore for about 1 week.

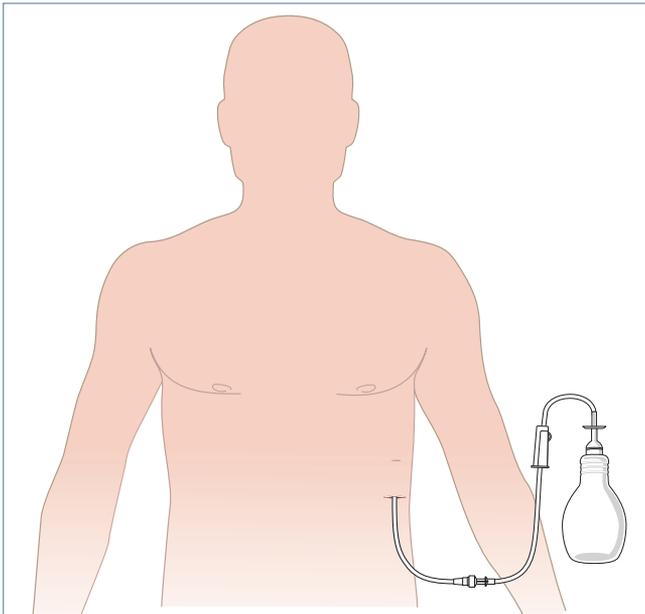
Your doctor will talk to you about using pain medication to ease the discomfort. Acetaminophen (Tylenol) is safe and is usually all you need to control your pain.

## How is liquid drained from the tube?

This is a simple and easy procedure. We arrange for a CLSC nurse to go to your home and do it for you on a regular basis.

We will make all the arrangements. Rest assured that you will not need to organize any of this by yourself. All the necessary equipment will be provided by the CLSC.

If you, a friend, or a relative would like to learn how to do this, let us know.



## How often does the liquid need to be drained?

How quickly the liquid builds up in the chest is different for everyone. With your pleural tube, you will be able to drain liquid as often as you need. Most people need drainage 2 or 3 times per week. But the drainage can be done every day if you need it.

Your doctor will prescribe how much and how often to drain liquid based on your needs.

## When will the drain be taken out?

Your pleural drain can stay in place permanently to remove liquid building up around your lungs.

However, if you no longer need it (that is, there is no more liquid building up around your lungs), we can remove it at any time.

We will take out your drain at the Day Hospital. This is a short and simple procedure, and you will not need a hospital stay.

## Washing & showering

We will place a bandage (**dressing**) over the area where the tube enters your chest (**the insertion site**). This bandage will be changed every time the tube gets drained.

You can shower normally with your tube in place. Taking baths is discouraged unless the bandage is fully covered with a plastic bag. The bandage must not sit under water. This is important to avoid infection. For the same reason, you should not go swimming.



# How and when to call us for help

**Do not wait.** Call us if you have questions or concerns.

Between 8AM and 4PM, you can reach the **Day Hospital** at **514-934-1934, ext.: 32568**

If the Day Hospital is closed (after 4pm on weekdays and on weekends), you can leave a message and we will call you back as soon as we can. You can also contact the CLSC nurse doing your tube drainages. If you are not feeling well and you cannot reach the day hospital team or the CLSC, go to the emergency room.

**CONTACT THE DAY HOSPITAL TEAM AS SOON AS POSSIBLE OR GO TO THE NEAREST EMERGENCY DEPARTMENT IF YOU:**

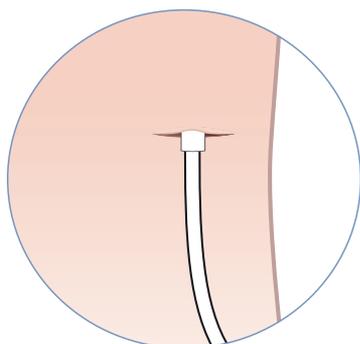
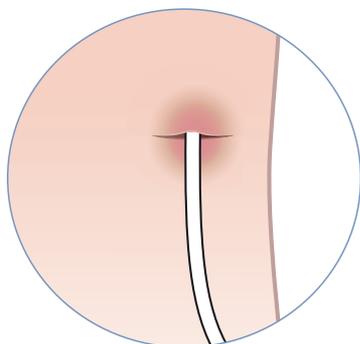
- Have **new** chest pain or pain around the drain tube that is getting worse
- Have a fever above 38.3 degrees Celsius
- Are having trouble breathing and it is getting worse

**DO NOT WAIT.**

**If no one can drive you, call 9-1-1.**

**YOUR DAY HOSPITAL TEAM  
SHOULD BE CONTACTED  
IF ANY OF THE FOLLOWING OCCURS:**

- There is redness of the skin around the pleural tube. This can be a sign of infection for which antibiotics may be needed.
- There is leakage of liquid or blood around the pleural tube.
- You have chest pain when the liquid is drained. The drainage prescription may need to be changed.
- The white cuff of the tube can be seen outside of the skin. There is more risk of infection and the drain can fall out.



- There is no or minimal (less than 50 ml) liquid draining from the tube. The tube may be blocked or maybe there is no remaining liquid and the tube can be removed.
- There is a sudden change in the amount of liquid being drained. For instance, if 500ml are usually drained but one day only 75ml is drained, the tube may be blocked.
- There is a change in the color of the liquid being drained. For instance, if the liquid becomes more cloudy or milky, it can be a sign of an infection.
- There is air draining from the pleural tube.
- The stitches have not been removed 14 days after the installation of the drain.



